

SUMMARY OF RESPONSE

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The Examiner states: “The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:
 1. Determining the scope and contents of the prior art.
 2. Ascertaining the differences between the prior art and the claims at issue.
 3. Resolving the level of ordinary skill in the pertinent art.
 4. Considering objective evidence present in the application indicating obviousness or non-obviousness.”
2. The Examiner states: “Claims 10-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Flashinski et al (U.S.P.N. 6,031,967) in view of Barnhart (U.S.P.N. 6,413,476).
With respect to claims 10, 18 and 20-21, the Flashinski reference teaches a heat-regulating container (14) for dispensing insecticides (26) into an atmosphere including the following: a heat-regulating container (14) having a flat reservoir with insecticide (22), an interior bottom surface with interior side walls (unlabeled inner surface of 22), exterior outer surface of a lower surface (32), the interior surface of the lower surface (unlabeled inner surface of 22) of the reservoir portion (22). See col.4, lines 34-37, which teaches that the entire container is made from one piece with projections in figure 5 extending from the interior surface of the unlabeled lower surface of the container. The reservoir having a plurality of protuberances (the meaning of protuberances is equivalent to projections such that the Flashinski reference teaches using a series of leg-like projections in col 4, lines 21-23), a heating device (10) with a heating surface (12) at

elevated temperature adapted to receive the heat-regulating container (14) and the protuberances defining several air gaps (col.4, lines 34-37) between the lower surface of the reservoir portion and the heating surface of the heating device (10) for regulating heat transfer from the heating surface (figure 4, 12) to the volatile material (figure 4, 26). The Flashinski reference heating means is through convection heating and fails to disclose that the protuberances are in direct contact with a heating surface in order to regulate the temperature of the volatile material in the container. The Barnhart reference discloses a container (3) whose bottom surface is in direct contact with the heating surface (6) in order to regulate the heat transfer from the heating surface to the volatile material (102) in the container. Thus, it would have been obvious to one having ordinary skill in the art at the time the invention was made to substitute the known convective heating means of the Flashinski reference with the known conductive heating means of the Barnhart reference since such a substitution makes the heating surface closer to the insecticide material for faster dispensing.

With respect to claims 11-13, the Flashinski reference teaches a container with a series of leg-like projections (i.e., protuberances) such that the numbers and the heights of the projections is a matter of design choice that is well within the scope of the artisan.

With respect to claims 14-16, the Flashinski reference teaches the following: the closure means includes an impermeable film (col.3, lines 4-5), the closure means includes a semi permeable membrane (col.2, line 65) and the closure means includes a permeable membrane (col.2, line 65).

With respect to claim 17, the Flashinski reference teaches the container (22) includes a volatile insecticide material (26).

With respect to claim 19, the Flashinski reference teaches a series of leg-like projections (i.e., protuberances) in col.4, lines 21-23 such that indenting the unlabeled lower surface of the reservoir forms the projections from the lower surface of the reservoir in figure 5.

With respect to claim 22, the Flashinski reference teaches a series (uniformly-distributed) of leg-

like projections (i.e., protuberances) in col.4, lines 21-23 such that the projections (30) extend from completely over the exterior bottom surface (32).”

3. The Examiner states: “Claims 10-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Flashinski et al (U.S.P.N. 6,031,967) in view of Encyclopedia Britannica Online.

With respect to claims 10, 18 and 20-21, the Flashinski reference teaches a heat regulating container (14) for dispensing insecticides (26) into an atmosphere including the following: a heat-regulating container (14) having a flat reservoir with insecticide (22), an interior bottom surface with interior side walls (unlabeled inner surface of 22), exterior outer surface of a lower surface (32), the interior surface of the lower surface (unlabeled inner surface of 22) of the reservoir portion (22) having (col.4, lines 34-37 teaches that the entire container is made from one piece with projections 30A and 31A in figure 5 extending from the interior surface of the unlabeled lower surface of the container) a plurality of protuberances (the meaning of protuberances is equivalent to projections such that the Flashinski reference teaches using a series of leg-like projections in col.4, lines 21-23), a heating device (10) with a heating surface (12) at elevated temperature adapted to receive the heat-regulating container (14) and the protuberances defining several air gaps (col.4, lines 34-37) between the lower surface of the reservoir portion and the heating surface of the heating device (10) for regulating heat transfer from the heating surface (figure 4, 12) to the volatile material (figure 4, 26). The Flashinski reference heating means is through convection heating and fails to disclose that the protuberances are in direct contact (conduction heating) with the hot surface in order to regulate the temperature of the volatile material in the container. The Encyclopedia Britannica discloses three known means of heating an object. Therefore, it would have been obvious to one having ordinary skill in the art to substitute the known convective heating means of the Flashinski reference with the known conductive heating means of Encyclopedia Britannica since such a substitution result in moving the heat

from one object directly to another object (Encyclopedia Britannica Online, line 13).

With respect to claims 11-13, the Flashinski reference teaches a container with a series of leg-like projections (i.e., protuberances) such that the numbers and the heights of the projections is a matter of design choice that is well within the scope of the artisan.

With respect to claims 14-16, the Flashinski reference teaches the following: the closure means includes an impermeable film (col.3, lines 4-5), the closure means includes a semi permeable membrane (col.2, line 65) and the closure means includes a permeable membrane (col.2, line 65).

With respect to claim 17, the Flashinski reference teaches the container (22) includes a volatile insecticide material (26).

With respect to claim 19, the Flashinski reference teaches a series of leg-like projections (i.e., protuberances) in col.4, lines 21-23 such that indenting the unlabeled lower surface of the reservoir forms the projections from the lower surface of the reservoir in figure 5.

With respect to claim 22, the Flashinski reference teaches a series (uniformly-distributed) of leg-like projections (i.e., protuberances) in col.4, lines 21-23 such that the projections (30) extend from completely over the exterior bottom surface (32)."

Response To Arguments

4. The Examiner states: "Applicant's arguments filed 08/27/2004 have been fully considered but they are not persuasive. On page 7 of the Response, applicant argues that, "Applicant submits that the cited prior art does not teach or anticipate a flat container for use in an insecticidal vaporizer, the container having a bottom surface with a plurality of uniformly-distributed protuberances extending therefrom for direct contact with a heating surface." The examiner disagrees. The Flashinski reference discloses a heat-regulating container (14) having a flat reservoir with insecticide (22), an interior bottom surface with interior side walls (unlabeled inner surface of 22), exterior outer surface of a lower surface (32), the interior surface of the lower surface

(unlabeled inner surface of 22) of the reservoir portion (22) having (col.4, lines 34-37 teaches that the entire container is made from one piece with projections 30A and 31A in figure 5 extending from the interior surface of the unlabeled lower surface of the container) a plurality of protuberances (the meaning of protuberances is equivalent to projections such that the Flashinski reference teaches using a series of leg-like projections in col.4, lines 21-23). The Barnhart reference discloses a container (3) whose bottom surface is in direct contact with the heating surface (6) in order to regulate the heat transfer from the heating surface to the volatile material (102) in the container. Thus, it would have been obvious to one having ordinary skill in the art at the time the invention was made to substitute the known convective heating means of the Flashinski reference with the known conductive heating means of the Barnhart reference since such a substitution makes the heating surface closer to the insecticide material for faster dispensing. On page 7 of the Response, applicant argues that, "Flashinski teaches that it is an advantage to eliminate contact between the heating surface and the insecticidal container, whereas the present invention provides for direct contact between the lower surface of the container and the heating surface." The Flashinski reference is applied for the structural limitations of the container and the protuberances extending thereof and not for direct contact with the heating surface. Such a feature is taught in the Flashinski reference. On page 8 of the Response, applicant argues that, "Barnhart does not teach direct contact between the heating element and the reservoir portion of the container." The examiner disagrees. The Barnhart reference discloses that the reservoir (3) in figure 2 is in direct contact with the heating surface (6) of the heating device, which is made up of 6 and 8. The heating surface (6) is heated by heating source (8). The instant claims do not recite the "heating element" limitation, instead, they recite the "a heating surface" limitation. The heating surface is the structure (6) in the Barnhart reference. On page 8 of the Response, applicant argues that, "Nor does Barnhart teach a reservoir portion having a plurality of indentation or protuberances extending, for direct contact with a heating element." The

Flashinski reference is applied for the direct heating feature and not for the reservoir limitations.

Such features are disclosed in the Flashinski reference as previously explained above.”

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RESPONSE

Remark 1:

Applicant has amended the claims to better distinguish the present invention over the cited prior art references. More particularly, Applicant has replaced the term “protuberances” with the term “dimples” or “dimpled”.

Remark 2:

Applicant requests the Examiner withdraw both Flashinski et al. as well as Barnhart as anticipating or obviating prior art references. Applicant points out that the cited prior art references fail to teach a flat reservoir with a dimpled lower surface for volatilizing insecticides. In neither of the cited references is there any suggestion, drawing or description of any container having any dimpled lower surface in conductive contact with any heating element. The dimpled lower surface of the novel reservoir creates a series of air gaps which is useful for controlling conductive heat transfer between the reservoir and a resistive heating element. The containers of the present invention are novel and non-obvious.

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CONCLUSION

Applicant respectfully submits that for all the foregoing reasons, the claimed subject matter describes patentable invention. Furthermore, Applicant submits that the specification is adequate and that the claims are in a condition for allowance. No new matter has been entered.

Applicant hereby respectfully requests Examiner to enter these amendments, find them descriptive of useful, novel and non-obvious subject matter, and authorize the issuance of a utility patent for the truly meritorious, deserving invention disclosed and claimed herein.

Without further, Applicant does not intend to waive any claims, arguments or defenses that they may have in response to any official or informal communication, paper, office action, or otherwise, and expressly reserves the right to assert any traverse, additional grounds establishing specificity and clarity, enablement, novelty, uniqueness, non-obviousness, or other patentability, etc.

Further, nothing herein shall be construed as establishing indirectly the basis for any prosecution history, file wrapper estoppel, or similar in order to limit or bar any claim of infringement of the invention described herein, either directly or under applicable doctrine of equivalents.

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Respectfully submitted,

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Dated: April 12, 2005

By: _____

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CERTIFICATE OF MAILING

I hereby certify that this paper and the documents attached hereto are being deposited in a postage prepaid, sealed envelope with the United States Postal Service using First Class Mail service under 37 CFR 1.08 on the date indicated and is addressed to "Commissioner for Patent, Alexandria, Virginia 22313-1450". Signed: _____

Date Mailed: April 12, 2005.